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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,179	10/30/2003	Jcen Hur	5882P064	1026
8791 7590 07/16/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER DUONG, CHRISTINE T	
			ART UNIT 2616	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/699,179

Applicant(s)

HUR ET AL.

Examiner

Christine Duong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 12 and 18 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7, 9-11, 13-17 and 19-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓  
Paper No(s)/Mail Date 10/30/2003 and 05/05/2006

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

The references listed in the Information Disclosure Statement, filed on 30 October 2003 and 05 May 2005, have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

### *Claim Objections*

1. **Claims 4-9** are objected to because of the following informalities:

Because of the limitation "said clock\_offset information" in Line 5, it is believed **Claim 4** was intended to depend on Claim 3 and has been treated as such for the remainder of this Office Action.

In addition, regarding **Claim 4**, it is suggested to rewrite the limitation "said terminal", in Line 9, as --said Bluetooth terminal--.

Because of the limitation "said clock\_offset information" in Line 5, it is believed **Claim 5** was intended to depend on Claim 3 and has been treated as such for the remainder of this Office Action.

Regarding **Claim 6**, it is suggested to rewrite the limitation "means for electrically connection", in Line 15, as --means for electrically connecting--.

Regarding **Claim 8**, it is suggested to rewrite the limitation "means for electrically connection", in Line 17, as --means for electrically connecting--.

Regarding **Claims 7 and 9**, it is suggested to replace the "/" (forward slash) with its corresponding meaning regarding the limitation "request/response".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-3** are rejected under 35 U.S.C. 102(e) as being anticipated by Kotola et al. (PG Pub US 2005/0079817 A1).

Regarding **Claim 1**, Kotola et al. discloses a Bluetooth-IP access system (Bluetooth and providing access to the Internet, [0039] Lines 5-6 and System 100, Fig. 1), comprising:

a Bluetooth-IP access device (the following elements alone or in combination of Access Point 104 and Server 116, Fig. 1) for searching and storing information regarding nearby access points including Bluetooth addresses ("the access point 104 uses the information transferred from the RF-ID reader 110 to prepare and send a paging message to the terminal 102", [0037] Lines 1-3 and "the Bluetooth terminal serial number is transmitted by the RF-ID tag 106 to the RF-ID reader 110", [0032] Lines 4-6);

a Bluetooth terminal (**the following elements alone or in combination of Terminal 102 and RF Reader 110, Fig. 1**) for accessing the access points by receiving the information regarding nearby access points, or by searching and storing the information (**“terminal 102 is in the paging scanning state and can receive the paging message from the access point 104, which provides the terminal 102 with the access point's clock timing and access code”, [0037] Lines 6-10**); and

a communication link (**Radio Link 115, Fig. 1**) for connecting said Bluetooth-IP access device and said Bluetooth terminal (**“the access point 104 for transfer to the terminal via radio link 115”, [0032] Lines 12-14**),

wherein mutual search is required by using said communication link, and Bluetooth addresses of nearby access points are provided by using said communication link (**“transceiver 204 interacts with a CPU 208 for implementing Bluetooth protocols and processing messages exchanged between the access point 104 and the terminal 102”, [0040] Lines 11-14 and “The server 116 can use the received terminal serial number or user ID to lookup information about either the user or the terminal 102, and return the accessed information to the access point 104 for transfer to the terminal via radio link 115”, [0032] Lines 9-14**).

Regarding **Claim 2**, Kotola et al. discloses everything claimed as applied above (see *Claim 1*). In addition, Kotola et al. discloses said communication link is a Bluetooth ACL link (**“the two devices form asynchronous connectionless link (ACL)”, [0037] Lines 16-17**).

Regarding **Claim 3**, Kotola et al. discloses everything claimed as applied above (see *Claim 1*). In addition, Kotola et al. discloses said information regarding said nearby access points further includes clock\_offset information ("**transmission of other valuable information such as the Bluetooth Clock Offset of the terminal 102**", [0033] Lines 7-9).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 6, 8, 12 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al. further in view of Fujioka (PG Pub US 2002/0193073 A1).

Regarding **Claim 6**, Kotola et al. discloses everything claimed as applied above (see *Claim 1*). In addition, Kotola et al. discloses a hardware of said Bluetooth-IP access device includes,

a main operation means in charge of operation within said Bluetooth-IP access device ("**The CPU 502 controls a short-range transceiver module 504 for initiating Bluetooth inquiry and paging processes with the terminal 102**", [0045] Lines 6-9);

a register setting means for setting the hardware state within said Bluetooth-IP access device through said main operation means ("**The CPU 502 is further connected to storage RAM 510 and the read-only memory 512, which provide the**

**connections and protocols to enable the terminal 102 to interact with a content database 514”, [0045] Lines 9-12);**

**a static data storage for storing data and program module needed for booting said Bluetooth-IP access device and read by said main operation means (“The CPU 502 implements terminal-to-content provider signaling using program instructions stored in the memory/ROM 512, after establishing a connection with the terminal 102 using the access point RF-ID module 503 input”, [0046] Lines 3-7).**

However, Kotola et al. fails to specifically disclose that a HCI communication means for bi-directional communication between said main operation means and a plurality of Bluetooth-IP access devices; a first electrical connection means for electrically connecting said HCI communication means and said main operation means; and a second electrical connection means for electrically connection said HCI communication means and said Bluetooth-IP access device, as claimed.

Nevertheless, Fujioka teaches **“the portable display terminal 20 is used as the master terminal 1 or one of the slave terminals 2 through 11” (Fujioka [0038] Lines 4-5) and “a host controller interface ( HCI) 66 is an interface between the host CPU 30 and the Bluetooth module 33. The HCI 66 includes a HCI application program interface (API), the UART 32 functioning as a transport layer between the host CPU 30 and the Bluetooth module 33 and a hardware driver for the Bluetooth module 33” (Fujioka [0040] Lines 23-29 and see Fig. 3).**

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add a HCI communication means between the main operation means and Bluetooth-IP access device in the hardware of the Bluetooth-IP access device because **“an UART driver and the hardware driver for the Bluetooth module 33 in the HCI 66, the link manager 67, the base band 68 and the physical layer 69 are equipped in the Bluetooth module 33”** (Fujioka [0041] Lines 10-13).

Regarding **Claim 8**, Kotola et al. discloses everything claimed as applied above (see *Claim 1*). In addition, Kotola et al. discloses a hardware of said Bluetooth terminal includes,

a main operation means in charge of operation within said terminal (**“The transceiver 204 interacts with a CPU 208 for implementing Bluetooth protocols and processing messages exchanged between the access point 104 and the terminal 102”**, [0040] Lines 11-14);

a register setting means for setting the hardware state within said Bluetooth-IP access device through said main operation means (**“read only memory 212 providing instructions for managing and controlling the operation of the terminal 102”**, [0040] Lines 18-20);

a static data storage for storing data and program module needed for booting said Bluetooth-IP access device and read by said main operation means (**“The CPU 208 executes programs stored in a non-volatile or read only memory 212**



**providing instructions for managing and controlling the operation of the terminal 102”, [0040] Lines 17-20);**

a dynamic data storage for storing data and program module needed for operating said Bluetooth-IP access device and read and written by said main operation means (**“The CPU 208 is linked to a volatile or dynamic random access memory (dram) 210 containing an operating system for processing messages, protocols, etc”, [0040] Lines 14-17).**

However, Kotola et al. fails to specifically disclose that a HCI communication means for bi-directional communication between said main operation means and a plurality of Bluetooth-IP access devices; a first electrical connection means for electrically connecting said HCI communication means and said main operation means; and a second electrical connection means for electrically connection said HCI communication means and said Bluetooth-IP access device, as claimed.

Nevertheless, Fujioka teaches **“the portable display terminal 20 is used as the master terminal 1 or one of the slave terminals 2 through 11” (Fujioka [0038] Lines 4-5) and “a host controller interface ( HCI) 66 is an interface between the host CPU 30 and the Bluetooth module 33. The HCI 66 includes a HCI application program interface (API), the UART 32 functioning as a transport layer between the host CPU 30 and the Bluetooth module 33 and a hardware driver for the Bluetooth module 33” (Fujioka [0040] Lines 23-29 and see Fig. 3).**

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add a HCI communication means between the

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main operation means and Bluetooth-IP access device in the hardware of the Bluetooth –IP terminal because **“an UART driver and the hardware driver for the Bluetooth module 33 in the HCI 66, the link manager 67, the base band 68 and the physical layer 69 are equipped in the Bluetooth module 33”** (Fujioka [0041] Lines 10-13).

Regarding **Claim 12**, Kotola et al. and Fujioka disclose everything claimed as applied above (see *Claim 6*). However, Kotola et al. fails to specifically disclose said HCI communication means includes an UART host interface of at least one port, as claimed.

Nevertheless, Fujioka teaches **“a universal asynchronous receiver transmitter (UART) 32”** (Fujioka [0038] Lines 7-8).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include a UART host interface of at least one port because **“the UART 32 functioning as a transport layer between the host CPU 30 and the Bluetooth module 33 and a hardware driver for the Bluetooth module 33”** (Fujioka [0040] Lines 26-29).

Regarding **Claim 18**, Kotola et al. and Fujioka disclose everything claimed as applied above (see *Claim 8*). However, Kotola et al. fails to specifically disclose that said HCI communication means includes an UART host interface of at least one port, as claimed.

Nevertheless, Fujioka teaches **“a universal asynchronous receiver transmitter (UART) 32”** (Fujioka [0038] Lines 7-8).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include a UART host interface of at least one port because **“the UART 32 functioning as a transport layer between the host CPU 30 and the Bluetooth module 33 and a hardware driver for the Bluetooth module 33”** (Fujioka [0040] Lines 26-29).

***Allowable Subject Matter***

6. **Claims 4-5, 7, 9-11, 13-17, 19-22** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Citation of Pertinent Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Kume et al.** (PG Pub US 2003/0041199 A1) discloses a UART in a controlling main unit, a method conveniently used by the UART for interrupting the main controlling unit, and asynchronous transmission between the main unit and a slave device with the UART.

**Melpignano et al.** (US Patent No. 7,193,991 B2) discloses a handoff procedure for handing over a slave unit from one master unit to another master unit in a communications network such as a local area network (LAN).

**Atkinson et al.** (PG Pub US 2002/0012329 A1) discloses wireless communications between devices and more particularly, to JAVA or JAVA-like technology based communications between baseband technology enabled devices.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Duong whose telephone number is (571) 270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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